

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for automatic triage of a text passage outputted by an optical character recognition system, the OCR-output text passage having multiple text segments, individual ones of the text segments including at least one OCR-output characterecharacters, the method comprising:

determining at least one OCR-output character attribute for each of the OCR-output characters in the OCR-output text passage;

determining an error rate for the OCR-output text passage as a whole using a triage model and the determined OCR-output character attributes; and

comparing the determined error rate for the OCR-output text passage with an OCR-output text passage threshold error rate to perform an OCR-output text passage triage decision.

2. (Previously Presented) The method of claim 1, wherein determining an error rate for the OCR-output text passage comprises:

providing the OCR-output character attributes to the triage model;
determining a character interpretation error value for each OCR-output character based on a probability of the at least one OCR-output character attribute being erroneously interpreted by the system; and

determining a text passage error value based on the at least one character interpretation error value determined for each OCR-output character.

3. (Original) The method of claim 2, further comprising:
 - determining a number representing a sum of OCR-output characters in the OCR-output text passage; and
 - dividing the text passage error value by the number representing the sum of OCR-output characters.
4. (Original) The method of claim 1, wherein determining at least one OCR-output character attribute for each OCR-output character comprises selecting the at least one OCR-output character attribute from a plurality of OCR-output character attributes.
5. (Original) The method of claim 4, wherein the plurality of OCR-output character attributes includes at least one of a character class, a confidence descriptor class, a language of the text passage, a text passage publication date, a typeface in which the text passage is printed, an image-based feature of an individual character image and metadata attached to the text passage.
6. (Original) The method of claim 1, wherein the text passage to be triaged includes at least one of pages, characters, words, phrases, text-lines, sentences, paragraphs, columns of text, blocks of text, text articles, multi-page documents, collections of single-page documents and collections of multi-page documents.
7. (Original) The method of claim 1, wherein the OCR-output text passage triage decision includes at least one of sending the OCR-output text passage directly to an end user without post-OCR processing, sending the OCR-output text passage through a post-OCR inspection and processing stage, and sending the original text passage image to be keyed in manually.
8. (Original) The method of claim 1, wherein the triage model is a trained off-line triage model.

9. (Original) The method of claim 1, wherein the OCR-output text passage threshold error rate is a predetermined value.

10. (Previously Presented) The method of claim 7, wherein sending the OCR-output text passage through the post-OCR inspection and processing stage comprises:

determining at least one text passage error probability value for each OCR-output text passage as a correction operator detects and corrects an error in the OCR-output text passage; and

alerting the correction operator when the at least one text passage error probability value is improved so as to meet the OCR-output text passage threshold error value,

wherein the text passage error probability value for each OCR-output text passage is based on a probability of the respective OCR-output character attributes being erroneously interpreted by the system.

11. (Original) The method of claim 10, wherein determining the text passage error probability value for an OCR-output text passage comprises:

determining OCR-output text passage error probability values for a plurality of selected portions of the OCR-output text passage; and

arranging the plurality of selected portions of the OCR-output text passage based on the determined OCR-output text passage error probability values such that the selected portions having the highest OCR-output text passage error probability values are displayed first to the correction operator.

12. (Currently Amended) A computer-implemented method for triage of a plurality of OCR-output text passages, each OCR-output text passage having multiple text

segments, individual ones of the text segments including at least one OCR-output characters, the method comprising:

selecting a set of OCR-output character attributes from a plurality of OCR-output character attributes for each OCR-output character;

determining an OCR-output character error value for each OCR-output character based on a probability of the set of OCR-output character attributes being erroneously interpreted by the OCR system;

determining a text passage error value for each OCR-output text passage as a whole based on a probability of the text passage being erroneously interpreted by the OCR system as determined using at least the OCR-output character error values; and

comparing the determined text passage error value with an OCR-output text passage threshold error value to perform an OCR-output text passage triage decision.

13. (Original) The computer-implemented method of claim 12, wherein the probability of the set of OCR-output character attributes being erroneously interpreted by the OCR system is determined based on at least the selected set of OCR-output character attributes processed using the triage model.

14. (Original) The computer-implemented method of claim 12, wherein the plurality of OCR-output character attributes includes at least one of a character class, a confidence descriptor class, a language of the text passage, a text passage publication date, a typeface in which the text passage is printed, an image-based feature of an individual character image and metadata attached to the text passage.

15. (Original) The computer-implemented method of claim 12, wherein the text passage to be triaged includes at least one of pages, characters, words, phrases, text-lines,

sentences, paragraphs, columns of text, blocks of text, text articles, multi-page documents, collections of single-page documents and collections of multi-page documents.

16. (Original) The computer-implemented method of claim 12, wherein the OCR-output text passage triage decision includes at least one of sending the OCR-output text passage directly to an end user without post-OCR processing, sending the OCR-output text passage through a post-OCR inspection and processing stage, and sending the original text passage image to be keyed in manually.

17. (Previously Presented) The computer-implemented method of claim 16, wherein sending the OCR-output text passage through a post-OCR inspection and processing stage comprises:

determining at least one text passage error probability value for each OCR-output text passage as a correction operator detects and corrects an error in the OCR-output text passage; and

alerting the correction operator when the at least one text passage error probability value is improved so as to meet the OCR-output text passage threshold error value,

wherein the text passage error probability value for each OCR-output text passage is based on a probability of the respective sets of OCR-output character attributes being erroneously interpreted by the system.

18. (Original) The computer-implemented method of claim 12, wherein determining a text passage error probability value for an OCR-output text passage comprises:

determining OCR-output text passage error probability values for a plurality of selected portions of the OCR-output text passage; and

arranging the plurality of selected portions of the OCR-output text passage based on the determined OCR-output text passage error probability values such that the selected portions having the highest OCR-output text passage error probability values are displayed first to the correction operator.

19. (Currently Amended) An OCR-output text passage triage system that triages a text passage outputted by an optical character recognition system, the OCR-output text passage including multiple text segments, individual ones of the text segments including at least one OCR-output character~~character~~characters, each having at least one OCR-output character attribute, the system comprising:

an OCR-output text passage character accuracy determination circuit or routine that determines a character interpretation error value for individual OCR-output characters within the OCR-output text passage using a triage model;

an OCR-output text passage accuracy determination circuit or routine that determines at least one OCR-output text passage quality metric for the text passage as a whole using the determined character interpretation error value and at least one statistical algorithm or model included in the triage model; and

an OCR-output text passage triage circuit or routine that performs one or more text passage triage decisions using the determined at least one OCR-output text passage quality metric and an OCR-output text passage threshold error rate value.

20. (Original) The OCR-output text passage triage system of claim 19, wherein the triage model is a trained off-line triage model.

21. (Original) The OCR-output text passage triage system of claim 19, wherein the OCR-output text passage threshold error rate value is included in a text passage error threshold operating point model.

22. (Original) The OCR-output text passage triage system of claim 19, wherein the at least one OCR-output character attribute includes at least one of a character class, a confidence descriptor class, a language of the text passage, a text passage publication date, a typeface in which the text passage is printed, an image-based feature of an individual character image and metadata attached to the text passage.

23. (Original) The OCR-output text passage triage system of claim 19, wherein the text passage to be triaged includes at least one of pages, characters, words, phrases, text-lines, sentences, paragraphs, columns of text, blocks of text, text articles, multi-page documents, collections of single-page documents and collections of multi-page documents.

24. (Original) The OCR-output text passage triage system of claim 19, wherein the OCR-output text passage triage decision includes at least one of sending the OCR-output text passage directly to an end user without post-OCR rekeying or correction, sending the OCR-output text passage through a post-OCR inspection and correction stage, and sending the original text passage image to be completely keyed in manually.

25. (Currently Amended) A computer-readable medium that provides instructions for triage of a text passage outputted by an optical character recognition system, the OCR-output text passage having multiple text segments, individual ones of the text segments including at least one OCR-output characterecharacters, instructions, which when executed by a processor, cause the processor to perform operations comprising:

determining at least one OCR-output character attribute for each of the OCR-output characters in the OCR-output text passage;

determining an error rate for the OCR-output text passage as a whole using a triage model and the determined OCR-output character attributes; and

comparing the determined error rate for the OCR-output text passage with an OCR-output text passage threshold error rate to perform an OCR-output text passage triage decision.

26. (Previously Presented) The computer-readable medium of claim 25, wherein determining an error rate for the OCR-output text passage comprises:

providing the OCR-output character attribute to the triage model;
determining a character interpretation error value for each OCR-output character based on a probability of the at least one OCR-output character attribute being erroneously interpreted by the system; and
determining a text passage error value based on the at least one character interpretation error value determined for each OCR-output character.

27. (Previously Presented) The computer-readable medium of claim 26, further comprising:

determining a number representing a sum of OCR-output characters in the OCR-output text passage; and
dividing the text passage error value by the number representing the sum of OCR-output characters.

28. (Previously Presented) The computer-readable medium of claim 25, wherein determining at least one OCR-output character attribute for each OCR-output character comprises selecting the at least one OCR-output character attribute from a plurality of OCR-output character attributes.

29. (Previously Presented) The computer-readable medium of claim 28, wherein the plurality of OCR-output character attributes includes at least one of a character class, a confidence descriptor class, a language of the text passage, a text passage publication date, a

typeface in which the text passage is printed, an image-based feature of an individual character image and metadata attached to the text passage.

30. (Previously Presented) The computer-readable medium of claim 25, wherein the text passage to be triaged includes at least one of pages, characters, words, phrases, text-lines, sentences, paragraphs, columns of text, blocks of text, text articles, multi-page documents, collections of single-page documents and collections of multi-page documents.

31. (Previously Presented) The computer-readable medium of claim 25, wherein the OCR-output text passage triage decision includes at least one of sending the OCR-output text passage directly to an end user without post-OCR processing, sending the OCR-output text passage through a post-OCR inspection and processing stage, and sending the original text passage image to be keyed in manually.

32. (New) A method for automatic triage of a text passage outputted by an optical character recognition system, the OCR-output text passage having at least one OCR-output character, the method comprising:

automatically training a triage model during a triage model training period with labeled training data that is generated from scanned images of text pages with corresponding validated characters from the text pages;

determining at least one OCR-output character attribute for each OCR-output character in the OCR-output text passage;

determining an error rate for the OCR-output text passage using the triage model and the determined OCR-output character attributes; and

comparing the determined error rate for the OCR-output text passage with an OCR-output text passage threshold error rate to perform an OCR-output text passage triage decision.

33. (New) The method of claim 32, wherein said automatically training the triage model further comprises estimating a conditional probability distribution model of an OCR-output character being correct given at least one OCR-output character attribute.

34. (New) The method of claim 32, wherein said automatically training the triage model further comprises estimating a conditional probability distribution model of an OCR-output character being incorrect given at least one OCR-output character attribute.